#### case 1:20-cv-00426-DAD-EPG Document 252-4 Filed 01/24/22 Page 1 of 11 1 ROB BONTA, State Bar No. 202668 Attorney General of California 2 TRACY L. WINSOR, State Bar No. 186164 Supervising Deputy Attorney General 3 COLLEEN R. FLANNERY, State Bar No. 297957 DANIEL M. FUCHS, State Bar No. 179033 4 SARA D. VAN LOH, State Bar No. 264704 Deputy Attorneys General 1300 I Street, Suite 125 5 P.O. Box 944255 6 Sacramento, CA 94244-2550 Telephone: (916) 210-7827 7 Fax: (916) 327-2319 E-mail: Daniel.Fuchs@doj.ca.gov 8 Attorneys for Plaintiffs California Natural Resources Agency, 9 California Environmental Protection Agency, and People of the State of California, ex rel. California 10 Attorney General Rob Bonta 11 IN THE UNITED STATES DISTRICT COURT 12 FOR THE EASTERN DISTRICT OF CALIFORNIA 13 14 15 THE CALIFORNIA NATURAL Case No. 1:20-cv-00426-DAD-EPG RESOURCES AGENCY, ET AL. 16 PLAINTIFFS' RESPONSES TO **DEFENDANT-INTERVENORS'** Plaintiffs. 17 **OBJECTIONS TO EVIDENCE; AND OBJECTIONS TO DEFENDANT**v. 18 **INTERVENORS' EVIDENCE** 19 Date: February 1, 2022 GINA RAIMONDO, ET AL., Time: 9:30 a.m. 20 Defendants. Dept: 5 The Honorable Dale A. Drozd Judge: 21 Trial Date: **TBD** Action Filed: February 20, 2020 22 23 24 25 26 27 28

#### CALIFORNIA'S RESPONSES TO INTERVENORS' OBJECTIONS TO EVIDENCE

Intervenors object to portions of the declarations of experts Les Grober and Bruce Herbold submitted in support of Plaintiffs' Motion for Interim Injunctive Relief on the grounds that these witnesses' specific expertise does not extend to every topic mentioned in their declarations. For example, Intervenors object to the portions of Mr. Grober's declaration that discuss the interplay between hydrologic flows and water temperature in the context of ensuring adequate water temperatures to sustain salmonid fisheries; the basis for this objection is that Mr. Grober is a hydrologist, not a fisheries biologist. ECF 234 at 3:5-4:9. Similarly, Intervenors object to two paragraphs of Dr. Herbold's declaration discussing the effect of water storage decisions for Lake Shasta on Winter-run salmon spawning on the grounds that Dr. Herbold is an ecologist and fish biologist, not "a Central Valley Project/State Water Project (CVP/SWP) operations expert." ECF 234 at 5:26–6:10.

These objections should be overruled. Intervenors do not dispute that Mr. Grober and Dr. Herbold are qualified as experts in their identified fields. Moreover, under Rule 702, "an expert maybe qualified either by 'knowledge, skill, experience, training, or education," and the rule "is broadly phrased and intended to embrace more than a narrow definition of qualified expert." *Thomas v. Newton Int'l Enterprises*, 42 F.3d 1266, 1269 (9th Cir. 1994). In *People v. Kinder Morgan Energy Partners, L.P.*, 159 F. Supp. 3d 1182 (S.D. Cal. 2016), for example, the court overruled an objection similar to the ones asserted here, made on the grounds that the witness' expertise was not sufficiently specific:

Kinder Morgan argues as a threshold matter that Dr. Waters is not qualified to provide an expert opinion on the method of valuing the supply and storage of water because he has never before done so. . . . Dr. Waters is clearly qualified as an economist. He has provided market analyses in a wide variety of industries, and he does not need to be a water supply or storage expert in order to provide a reasoned opinion on the operation of the applicable market.

Id. at 1190.

Courts also recognize that an expert's specific field of expertise may overlap with other disciplines, which does not preclude the expert from offering relevant testimony. The court in *Pooshs v. Phillip Morris USA, Inc.*, 287 F.R.D. 543 (N.D. Cal. 2012) found that "despite not

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having a marketing degree," a public health expert was "qualified, by education, experience, and training, to opine regarding advertising and marketing in the area of public health." *Id.* at 553. The witness could "be designated as an expert in this limited area without also being an expert in the total universe of commercial marketing and advertising." *Id.* Similarly here, Mr. Grober and Dr. Herbold may apply their knowledge, experience, and expertise in offering opinions relevant to issues in this case without "also being [experts] in the total universe" of disciplines those opinions touch on.

Finally, as Intervenors implicitly acknowledge by asking this Court to "disregard or accord little or no weight" to the challenged evidence (ECF 234 at 2:17–17), objections that otherwise qualified experts lack sufficient specialized knowledge is not a basis to exclude their testimony: "Whether an expert is the 'best' qualified or has sufficient specialized knowledge is generally a matter of weight, not admissibility." *LaCava v. Merced Irr. Dist.*, No. 1:10-CV-00853 LJO, 2012 WL 913697, at \*5 (E.D. Cal. Mar. 16, 2012). Plaintiffs request that the Court overrule the objections, addressed specifically below.

| MATERIAL   | GROUNDS FOR OBJECTION   | PLAINTIFFS'  |
|--|---|--|
| OBJECTED TO  |   | RESPONSE   |
| Grober Decl. ¶¶ 30, 32-35, 37, 43-51, 54, 57-58, 61-64, 70-73, 75, 77, 79. | Fed. R. Evid. (FRE) 701, 702.  As Mr. Grober declares, he is a hydrologist. ("A hydrologist is a scientist who specializes in the technical side of water management, including engineering, atmospheric, environmental, and geologic aspects." Grober Decl. ¶ 1.)  Mr. Grober is not a fisheries biologist and neither his declaration nor curriculum vitae provide a basis for him to testify as an expert on fisheries biology. Grober Decl., Ex. A. In fact, during his January 5, 2022 deposition, Mr. Grober testified that he does not consider himself an expert in fishery biology, <sup>1</sup> he did not consider any documents in developing his opinions about survival of winter-run | Mr. Grober's expertise as a hydrologist is multi-faceted, as Defendant-Intervenors acknowledge. Accordingly, it includes the effects of water management on environmental components, such as water temperature profiles necessary to sustain fisheries. The well-known fact that sufficiently low water temperatures in the |

<sup>&</sup>lt;sup>1</sup> Q: You don't consider yourself an expert in fishery biology, do you, Mr. Grober? A: No. (Grober Trans. at 145:8-10.)

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| 1 |                              | Chinook salmon, and he did not speak to any   | Sacramento River are                            |
|---|------------------------------|---|---|
| 2 |                              | fisheries biologists in developing his opinions. Declaration of Samuel Bivins ¶ 4,        | necessary to sustain                            |
|   |                              | Ex. C, Transcript of Deposition of Les  | certain fish populations                        |
| 3 |                              | Grober (Grober Trans.) at 145:8-9, 147:10-  | is the basis of                                 |
|   |                              | 25.   | numerous regulatory                             |
| - |                              | Furthermore, at the outset of his declaration,  | requirements (Grober                            |
|   |                              | he states that he will "discuss and provide opinions on the following topics: Severity of | Decl. ¶ 20), including provisions of the 2019   |
|   |                              | the Current Drought; Shasta Reservoir and   | Biological Opinions at                          |
|   |                              | Sacramento River Operations; Sacramento   | issue in this case. The                         |
|   |                              | River Temperature Requirements;<br>Uncertainty of Future Hydrology; Carryover             | opinions in the                                 |
|   |                              | Storage, Timing of Deliveries, Alternative  | challenged portions of                          |
|   |                              | Water Supplies, and Water Rights." Grober   | Mr. Grober's                                    |
|   |                              | Decl. ¶ 10, notably not including any   | declaration address the                         |
|   |                              | references to ecological issues, fish/species,  | interplay between                               |
|   |                              | or harm/protection of the same.   | water releases and                              |
|   |                              | However, the "summary of [Mr. Grober's]   | water temperature, and                          |
|   |                              | opinions" at the conclusion of his declaration  | the probable effects of                         |
|   |                              | specifically opine on fisheries biology issues  | failure to meet certain temperature             |
|   |                              | in nearly every bulleted opinion. Grober Decl. ¶ 79. In fact, throughout his              | requirements on fish.                           |
|   |                              | declaration, Mr. Grober mentions "Chinook"  | Mr. Grober is qualified                         |
|   |                              | 49 times, "salmon" 54 times, "species" 12   | by education,                                   |
|   |                              | times, "fish" 33 times, "effect/s" to the   | experience, and                                 |
|   |                              | Same 15 times, "harm" to the same 32  | training to opine                               |
|   |                              | times, "protect/protection" of the same 36  | regarding hydrologic                            |
|   |                              | times, and even mortality 4 times.  | temperature                                     |
|   |                              | Mr. Grober's fisheries biology opinions   | management in the                               |
|   |                              | throughout his declaration, as summarized at  | area of fisheries – he                          |
|   |                              | paragraph 79, are far beyond the scope of the   | may "be designated as                           |
|   |                              | opinions that he set out to discuss at  | an expert in this<br>limited area without       |
|   |                              | paragraph 10 and, specifically, far beyond the scope of the "scientific, technical, or    | also being an expert in                         |
|   |                              | other specialized knowledge" (i.e., as a  | the total universe" of                          |
|   |                              | "hydrologist") on which his opinions are  | fisheries biology.                              |
|   |                              | based. Therefore, these objections should be  | Pooshs v. Phillip                               |
|   |                              | sustained and the fisheries biology opinions disregarded.                                 | Morris USA, Inc., 287                           |
|   |                              | distoguidod.  | F.R.D. 543, 553 (N.D.                           |
|   |                              |   | Cal. 2012).                                     |
|   |                              |   |   |
|   | O 1 D 1 mm 10                | EDE 701, 702  | M. C. I. I.                                     |
|   | Grober Decl. ¶¶ 18,          | FRE 701, 702.   | Mr. Grober's expertise                          |
|   | 21, 32-39, 41-65, 70-<br>79. | Neither his declaration nor his <i>curriculum</i>   | as a hydrologist                                |
|   | 17.                          | vitae provide a basis for Mr. Grober to   | specifically includes<br>the "technical side of |
|   |                              | testify as an expert on Central Valley  | water management,                               |
|   |                              | Project (CVP) operations or Sacramento  | including engineering,                          |
|   |                              | J - ( / - F   |   |

|                             |  | T .                                       |
|-----------------------------|--|---|
|                             | River temperature management. Grober   | atmospheric,                              |
|                             | Decl., Ex. A. He is a hydrologist. Grober                                    | environmental, and                        |
|                             | Decl. ¶ 1.   | geologic aspects."                        |
|                             |  | Grober Decl. ¶ 1.                         |
|                             | During his deposition, Mr. Grober testified                                  | Further, Mr. Grober's                     |
|                             | that "[he] know[s] a lot more than many                                      | qualifications include                    |
|                             | other people [about CVP operations] but not                                  | over a decade of                          |
|                             | as much as the people that are the real                                      | experience relating                       |
|                             | principal experts." Grober Trans. at 148:5-                                  | directly to CVP                           |
|                             | 15. In other testimonial words, "frankly                                     | operations: "During                       |
|                             | [Mr. Grober] do[es]n't know what [he]  | my time at the State                      |
|                             | do[es]n't know." Grober Trans. at 28:10-17.                                  | Water Board, I was                        |
|                             | And knowing "more than many" does not  | responsible for the                       |
|                             | satisfy FRE 702's requirement for  | modeling and review                       |
|                             | "scientific, technical, or other specialized                                 | of modeling to assess                     |
|                             | knowledge." Thus, Mr. Grober is not a  | the effects of changes                    |
|                             | "real" expert on CVP operations. Regarding                                   | in hydrology, and                         |
|                             | Sacramento River temperature management,                                     | Central Valley Project                    |
|                             | Mr. Grober specifically admits that he is not                                | (CVP) and State Wate                      |
|                             | an expert. <sup>2</sup> Grober Trans. at 149:18-25.                          | Project (SWP)                             |
|                             |  | collectively, Projects)                   |
|                             | Nevertheless, Mr. Grober provides  | operations, on Delta                      |
|                             | extensive expert opinions on CVP   | water flow and water                      |
|                             | operations and Sacramento River  | quality. I am familiar                    |
|                             | temperature management. He mentions  | with Bay-Delta                            |
|                             | "temperature" management/  | hydrology issues and have worked with     |
|                             | control/requirements/benefits/planning/                                      |   |
|                             | profiles/limits/targets/goals 121 times.                                     | modeling staff at the                     |
|                             | Mr. Grober's CVP operations and  | Department of Water Resources and United  |
|                             | Sacramento River temperature management                                      |   |
|                             | opinions require "scientific, technical, or                                  | States Bureau of                          |
|                             | other specialized knowledge" that he, himself, admits that he does not have. | Reclamation regarding Delta hydrology and |
|                             | Therefore, these objections should be  | water quality." Grober                    |
|                             | sustained and the opinions disregarded.                                      | Decl. ¶ 4.                                |
|                             | sustained and the opinions disregarded.                                      | Deci.    4.                               |
|                             |  | Mr. Grober's modest                       |
|                             |  | self-assessment during                    |
|                             |  | his deposition,                           |
|                             |  | acknowledging that                        |
|                             |  | there may be others                       |
|                             |  | with greater knowledg                     |
|                             |  |   |
| <sup>2</sup> Q: Do you cons | sider yourself an expert on water temp tower [sic] mana                      | gement in the Sacramer                    |
| river?                      |  |   |
| river?                      | I mean because I think there's – there's – no. There's                       |   |

A: No that's easy I mean because I think there's – there's – no. There's a lot of people that know a lot about that and I know enough about the connected necessary of things so I know elements of it. (Grober Trans. at 149:18-25.)

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| 1  |                            |   | about CVP operations,                          |
|----|----------------------------|---|--|
| 2  |                            |   | in no way undermines                           |
| 2  |                            |   | his own qualifications. Mr. Grober is "clearly |
| 3  |                            |   | qualified" as a                                |
| 4  |                            |   | hydrologist, and he has                        |
| 5  |                            |   | ample experience and                           |
| 5  |                            |   | knowledge specifically regarding the CVP; "he  |
| 6  |                            |   | does not need to be a                          |
| 7  |                            |   | [CVP operations                                |
|    |                            |   | expert] in order to                            |
| 8  |                            |   | provide a reasoned                             |
| 9  |                            |   | opinion on the operation of the                |
| 10 |                            |   | applicable [project]."                         |
| 10 |                            |   | People v. Kinder                               |
| 11 |                            |   | Morgan Energy                                  |
| 12 |                            |   | Partners, L.P., 159 F.<br>Supp. 3d 1182, 1190  |
|    |                            |   | (S.D. Cal. 2016).                              |
| 13 |                            |   | ,  |
| 14 | C 1 D 1 M 10               | EDE 701 702   | M C 1 11 1 1                                   |
| 15 | Grober Decl. ¶¶ 40, 77-78. | FRE 701, 702.   | Mr. Grober's limited testimony about the       |
| 13 | 77 70.                     | Neither his declaration nor his <i>curriculum</i>                                   | timing of water                                |
| 16 |                            | vitae provide a basis for Mr. Grober to   | deliveries for                                 |
| 17 |                            | testify as an expert on agricultural matters.                                       | agriculture and                                |
|    |                            | Grober Decl., Ex. A. He is a hydrologist. Grober Decl. ¶ 1.                         | potential water<br>transfers and               |
| 18 |                            | Groter Beer.   1.   | groundwater pumping                            |
| 19 |                            | During his January 5, 2022 deposition, Mr.  | as alternatives for                            |
| 20 |                            | Grober testified that, along with his   | agricultural water                             |
| 20 |                            | "common sense," Figure 6 is the only document he considered in reaching his rice    | supply is well within his expertise as a       |
| 21 |                            | planting opinions. Grober Trans. at 116:8-  | hydrologist. Mr.                               |
| 22 |                            | 118:24. He also did not speak to any rice   | Grober clearly                                 |
|    |                            | farmers before reaching his opinions on rice  | explained the basis for                        |
| 23 |                            | farming. Grober Trans. at 118:25-119:9. When asked how Sacramento Valley rice       | his opinions regarding the timing of water     |
| 24 |                            | farmers determine the level of expected   | supply (Grober Decl. ¶                         |
| 25 |                            | water deliveries, he testified that "[he]   | 40), and generally                             |
|    |                            | do[es] not know how they determine how  | explained that water                           |
| 26 |                            | much water they're going to be getting in any given year." Grober Trans. at 119:17- | transfers and groundwater pumping              |
| 27 |                            | 120:7. Notably, counsel for Plaintiffs  | are two options                                |
| 28 |                            |   | available to reduce any                        |
| ∠0 |                            |   |  |

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| 1   |                         | objected to this question on the basis that it                                       | economic impacts of                                |
|-----|-------------------------|--|--|
| 2   |                         | calls for speculation from Mr. Grober.   | the IOP on agricultural water users. Mr.           |
| 3   |                         | Nevertheless, Mr. Grober provides expert opinions on agricultural, agribusiness, and | Grober is qualified to offer this limited          |
| 4   |                         | agronomy decisionmaking, purchases, and  | testimony regarding                                |
| 5   |                         | scheduling (e.g., decisions and timing related to crop planting, water transfer      | the IOP's interplay between hydrology and          |
| 6   |                         | agreements, and reliance on groundwater  | agriculture "without                               |
| 7   |                         | pumping).  | being an expert in the total universe" of          |
|     |                         | Mr. Grober's expert agricultural opinions  | agricultural matters.                              |
| 8   |                         | require "scientific, technical, or other   | Pooshs v. Phillip<br>Morris USA, Inc., 287         |
| 9   |                         | specialized knowledge" – not "common sense" from a hydrologist. Therefore, these     | F.R.D. 543, 553 (N.D.                              |
| 10  |                         | objections should be sustained and the   | Cal. 2012).  |
|     | 77 1 117 1 55           | opinions disregarded.  |  |
| 11  | Herbold Decl. ¶¶ 8, 35. | FRE 701, 702.  | The challenged paragraphs discuss the              |
| 12  | 33.                     | As Dr. Herbold declares, he is an ecologist.   | effects of certain water                           |
| 13  |                         | "I am a private consultant in estuarine  | management actions on                              |
| 13  |                         | ecology with more than 40 years of   | salmon and smelt in                                |
| 14  |                         | experience in ecology of fish " Herbold Decl. ¶ 1.                                   | California, which is well within Dr.               |
| 15  |                         | Dr. Herbold is not a Central Valley Project/   | Herbold's expertise as                             |
| 1.6 |                         | State Water Project (CVP/SWP) operations   | a fish ecologist focused                           |
| 16  |                         | expert.  | on the Sacramento-San<br>Joaquin Bay-Delta         |
| 17  |                         | Nevertheless, Dr. Herbold provides expert  | Estuary. Herbold Decl.                             |
| 18  |                         | opinions on CVP/SWP operations (i.e.,  | ¶ 1. Defendant-                                    |
| 10  |                         | opining on causation related to carryover  | Intervenors do not                                 |
| 19  |                         | storage and winter 2020 planning). Dr. Herbold's operations opinions are             | dispute that Dr. Herbold is qualified as           |
| 20  |                         | beyond the scope of the "scientific,   | an ecologist. He may                               |
| 21  |                         | technical, or other specialized knowledge" (i.e., as an "ecologist") on which his    | testify about the effects of CVP/SWP               |
| 22  |                         | opinions are based. Therefore, these   | operations on fish                                 |
| 23  |                         | objections should be sustained and the opinions disregarded.                         | "without being an expert in the total              |
| 24  |                         |  | universe" of CVP/SWP operations. <i>Pooshs v</i> . |
| 25  |                         |  | Phillip Morris USA,<br>Inc., 287 F.R.D. 543,       |
| 26  |                         |  | 553 (N.D. Cal. 2012).                              |
| 27  |                         |  |  |
| 28  |                         |  |  |
| 11  |                         |  |  |

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# CALIFORNIA PLAINTIFFS' OBJECTIONS TO DEFENDANT-INTERVENORS' EVIDENCE<sup>3</sup>

2 3 **MATERIAL GROUNDS FOR OBJECTION RULING ON** 4 **OBJECTED TO OBJECTION** 5 Cavallo Decl. ¶¶ 10, 12, Fed. R. Evid. 702. Sustained 13 Overruled 6 Mr. Cavallo states, "In the summer of 2021, I and two of my colleagues surveyed three 7 separate spawning riffles on the Sacramento River at Redding. We collected data on the 8 characteristics of the spawning riffles and found them to be free of excessive fine 9 sediment and with gravels within the acceptable size range for Chinook salmon 10 spawning." 11 Mr. Cavallo contends that his survey demonstrates that the quality of the 12 Sacramento River is better for salmon than the published, peer-reviewed literature 13 suggests. 14 From this survey, Mr. Cavallo concludes, "[O]ur measurements of Sacramento River 15 hydraulic conductivity almost certainly underestimated the quality of conditions 16 experienced by winter-run Chinook salmon." 17 "The data we collected on the Sacramento 18 River this year, along with evidence from other comparable Central Valley Rivers . . . 19 suggest conditions hypothesized by the Martin papers are not likely to occur for 20 winter-run in the Sacramento River." 21 No data have been distributed, and none of 22 this analysis has been peer-reviewed. Mr. Cavallo fails to establish that his survey and 23 related conclusions are based on sufficient facts and data and are the product of reliable 24 principles and methods that were appropriately applied. 25

<sup>&</sup>lt;sup>3</sup> In addition to the objections below, California requests that the Court disregard the declaration of Charles Hanson, *PCFFA* ECF 358, which was not filed in the *CNRA* case and does not purport to address the injunction sought by California.

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| 1  | Cavallo Decl. ¶ 14           | Fed. R. Evid. 702.  | ☐ Sustained                                       |
|----|------------------------------|---|---|
| 2  | "                            | Mr. Cavallo suggests that old data from the   | ☐ Overruled                                       |
|    |                              | Feather and American Rivers provides  |   |
| 3  |                              | useful information for the dissolved oxygen content in the Sacramento River.              |   |
| 4  |                              |   |   |
| 5  |                              | "Data collected from other large Central Valley rivers hosting Chinook salmon             |   |
| 6  |                              | spawning also suggests dissolved oxygen is  |   |
|    |                              | not generally limiting. DWR conducted extensive studies of intergravel flow and           |   |
| 7  |                              | dissolved oxygen in spawning gravels of the Feather River (CDWR 2004). They               |   |
| 8  |                              | observed mean dissolved oxygen  |   |
| 9  |                              | concentrations between 8.5 and 11 mg/L (Table 5.1-6). Similar studies were                |   |
| 10 |                              | conducted in Chinook salmon spawning gravels of the American River."                      |   |
| 11 |                              | Mr. Cavallo does not provide a basis for  |   |
| 12 |                              | applying these data to winter-run Chinook salmon in the Sacramento River., and            |   |
| 13 |                              | admits that conditions in the Feather and   |   |
|    |                              | American Rivers are not the same as in the Sacramento River. Herbold Decl. ¶ 51;          |   |
| 14 |                              | Flannery Decl., Exh. 2, 145:3–146:19.   |   |
| 15 |                              |   |   |
| 16 | Cavallo Decl. ¶ 31 (Table 2) | Fed. R. Evid. 702.  | <ul><li>☐ Sustained</li><li>☐ Overruled</li></ul> |
| 17 | (Table 2)                    | By using percentages as data and using  | □ Overruled                                       |
|    |                              | single numbers rather than two sets of data, Mr. Cavallo violates standard guidance on    |   |
| 18 |                              | how to use his statistic. Herbold Decl. ¶ 17. As one example, the two very small          |   |
| 19 |                              | numbers, the smallest overall in fact, have a   |   |
| 20 |                              | difference that is very small, but a % deviation that is very large, because the          |   |
| 21 |                              | 2.4% "difference" between 5% and 2.6% is a misleadingly large 90% of that tiny 2.6%       |   |
|    |                              | actual difference. <i>Id</i> .  |   |
| 22 | Cavallo Decl. ¶¶ 33, 35      | Fed. R. Evid. 702.  | ☐ Sustained                                       |
| 23 | 1111 7 2 2                   | Cavallo admits at paragraph 6 that thiamine   | □ Overruled                                       |
| 24 |                              | effects are "uncertain," but by paragraph 35,   |   |
| 25 |                              | calls thiamine deficiency "the primary culprit" for the low egg-to-fry survival. He       |   |
| 26 |                              | provides no known scientific basis for the  |   |
|    |                              | following conclusion:   |   |
| 27 |                              | "The effects of thiamine deficiency on egg<br>or early fry survival have not been studied |   |
| 28 |                              | or earry if y survivar have not been studied  |   |

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| 1 2 3    |                      | for naturally spawning winter-run Chinook salmon, but these effects are expected to be more severe than adverse effects observed in the hatchery or laboratory settings."         |                        |
|----------|----------------------|---|------------------------|
| 4        | Cavallo Decl. Fig. 4 | Fed. R. Evid. 702.  No underlying data or analysis are provided,  | Sustained<br>Overruled |
| 5<br>6   |                      | and Mr. Cavallo himself admits in the caption of this figure that he "cherry-picked" data by omitting certain years in  |                        |
| 7 8      |                      | which temperature-dependent mortality and flows would have affected the outcome. Mr. Cavallo fails to establish that this figure is based on sufficient facts and data and is the |                        |
| 9        |                      | product of reliable principles and methods that were appropriately applied. Herbold Decl, ¶ 15.   |                        |
| 11       | Cavallo Decl. ¶ 37   | Fed. R. Evid. 702.  | Sustained              |
| 12       |                      | Mr. Cavallo asserts conclusions<br>dramatically overestimating passage of<br>winter-run fry. These conclusions are  | Overruled              |
| 13<br>14 |                      | entirely unsupported by reliable data or<br>methods and are not peer reviewed. The<br>adjustments to fish passage are already   |                        |
| 15<br>16 |                      | accounted for in the JPE letter using standard scientific methods. Herbold Decl., Exh. A, p. 6.   |                        |
| 17       | Cavallo Decl. ¶ 61   | Fed. R. Evid. 702.  | Sustained              |
| 18       |                      | Mr. Cavallo reports unreviewed results of running a revised Martin model:   | Overruled              |
| 19       |                      | "As detailed in Exhibit D, we requested and   |                        |
| 20 21    |                      | eventually received the analytical code<br>NMFS indicated they have relied upon (and  |                        |
| 22       |                      | continue to rely on) to estimate TDM. In addition to the foundational problems of the   |                        |
| 23       |                      | Martin model described previously, we used<br>the code to develop appropriate confidence  |                        |
| 24       |                      | intervals for TDM, and while doing so identified serious problems that have not   |                        |
| 25       |                      | previously been disclosed or considered."   |                        |
| 26       |                      | Unlike the Martin model itself, these results have not been published or peer reviewed  |                        |
| 27       |                      | and should not be considered. Herbold, ¶ 54. Moreover, Exhibit D shows that NMFS  |                        |
| 28       |                      |   |                        |

#### dase 1:20-cv-00426-DAD-EPG Document 252-4 Filed 01/24/22 Page 11 of 11 1 has addressed the underlying issues with the model. Cavallo Decl. Ex. D at 3. Mr. 2 Cavallo's document production shows the same. Flannery Decl. Ex. 4 at 3 CAVALLO\_002143-CAVALLO\_002148. 4 5 6 Dated: January 24, 2022 Respectfully submitted, 7 ROB BONTA 8 Attorney General of California TRACY L. WINSOR 9 Supervising Deputy Attorney General 10 11 /S/ Daniel M. Fuchs 12 DANIEL M. FUCHS Deputy Attorney General 13 Attorneys for Plaintiffs California Natural Resources Agency, California 14 Environmental Protection Agency, and People of the State of California, ex rel. 15 California Attorney General Rob Bonta 16 SA2019300725 17 35847617.docx 18 19 20 21 22 23 24 25 26 27 28